# Needs Assessment and Health Equity Data Analysis Randolph County









Executive Summary and Action Blueprint Prepared for Randolph County by the North Carolina Institute for Public Health



Institute for Public Health

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# **Randolph County Health Department**

Key staff from the Randolph County Health Department who contributed to this assessment process.

Tara Aker Susan Hayes Wendy Kennon Laura Lambert Kendall Phillips Arey Rash

### North Carolina Institute for Public Health

Belinda Ear Jeannine Herrick Matt Simon Amy Thomas Elizabeth Thomas John Wallace

# **Randolph County Strategic Session**

Community members who participated in the strategic session to inform this document's action plan.

Kirstie Blake
Courtney Chavis
Elworth Cheek
Donovan Davis
Ashely Duggins
Beth Duncan
Judy Ebanks
Elyse Hayes

Roger King Julie Mabe Gene McRae Barry Morris Kim Richau Lewis Schirloff Teresa Shackleford

Beth Thomas Sam Varner

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# Introduction

The North Carolina Institute for Public Health (NCIPH) is pleased to present this Executive Summary of our recent Needs Assessment and Health Care Equity Data Analysis in Randolph County. The goal of this project was to assist Randolph County in gaining an understanding of the health care needs and key health disparities in their community, leading to improved access to health care for all its residents, with particular emphasis on vulnerable populations.

The objectives for this project include:

- Evaluate the current availability of various health care services to Randolph County residents;
- Identify gaps in health care services;
- Identify barriers to the receipt of health care services;
- Identify populations who experience barriers to health care services;
- Identify factors contributing to higher health risks and poorer outcomes for specific populations;
- Identify social and environmental challenges that affect the receipt of health care services across populations;
- Recommend strategies to address identified barriers and disparities.

# Context

Randolph is the 11<sup>th</sup> largest county in the state and has the 19<sup>th</sup> highest population. The county's population is growing more quickly compared to North Carolina as a whole; however, the county's population is aging. Randolph County is mostly white (80%), and while it has a larger Hispanic population (11%) than the state (8%), only 5% of residents are black, compared with 22% of North Carolina's total population.

Although Randolph County's unemployment rate improved considerably between 2009 and 2016, 21% of the population remains uninsured. And while fewer students drop out of Randolph County high schools compared to the state average, only 14% of residents have a bachelor's degree or higher, a number that is half the state average.

Randolph County has a physician population that is not sufficient to meet the needs of its residents, particularly when it comes to adult primary care. The shortage of physicians may be a contributing factor for the overuse of Randolph Health's emergency department for primary and chronic disease care.

# **Project Methodology**

Our project took an iterative approach, with each part of data collection and analysis informing the development and implementation of subsequent components, culminating in a group process to interpret the needs assessment results.

We took a three-tiered approach to collecting data for our analysis. First, we analyzed who in Randolph County is seeking care and where they go to receive it. Using hospital discharge data from emergency department and inpatient hospital visits by Randolph County residents from fiscal years 2011 to 2015, we constructed demographic tables for each dataset as well as tables for insurance status, service provided, patient location (zip code) and facility location (county) (Appendix 1). We also created maps that display the distribution of Randolph residents seeking care in Randolph and each of its surrounding counties (Appendix 1).

Second, we inventoried the current landscape of health care resources available to Randolph County residents within its borders. We identified health care providers, office hours, locations and insurance taken and ascertained which providers are willing to accept payment plans or discounts for uninsured patients. These findings are presented as a spreadsheet (Appendix 2) that can be shared with county stakeholders, including residents seeking care. The provider data is also available as GIS shapefiles (Appendix 2) that can be presented on the Health Department's website.

Finally, to supplement and provide context to the secondary data sources used in our first two stages of analysis, we conducted 16 key informant interviews with stakeholders and leaders who had various roles in the community ranging from medical service leadership and delivery to working with vulnerable populations in non-medical settings. We also conducted four focus groups with community members and leaders to explore key health care access issues facing Randolph County.

# **Key Findings**

# Disparities & Vulnerable Populations

Immigrants are perceived as reluctant to seek health care by key informants across all sectors due to fear of deportation. Some of the Hispanic population is reported to seek care in Siler City because it is perceived as more welcoming to the Spanish-speaking population. Within Randolph County, there are also limited numbers of Spanish-speaking providers in specialty areas, including mental health.

Children living in Randolph County are vulnerable due to a number of factors, including lack of access to early childhood education, lack of pediatric care within the local hospital and low use of WIC services. Daycare is readily available in Randolph County, but the subsidies that make it affordable for many families are in short supply, with the Department of Social Services (DSS) providing them to only 16% of eligible children. Early childhood education can serve as a link to improved economic and health outcomes for the whole family, including improved nutritional status, better employment options for parents and other supports. As such, it is an "upstream" intervention that can have lasting impact on the well-being of the county.

Proper nutrition is a concern for some vulnerable children within the county who are not enrolled in high-quality childcare, early education or WIC services. Additionally, while there is inpatient general pediatric care available at Randolph Health, children with special health care needs, including infants in the Neonatal Intensive Care Unit, must travel out of the county for their care.

While the elderly population are vulnerable when it comes to transportation access, they benefit from having access to insurance through Medicare as well as support from entities such as the Senior Adult Association. Baby boomers are also vulnerable as they begin to confront health issues that keep them from working, while not yet qualifying for Medicare benefits.

# Mental Health

Similar to the entire state of North Carolina, there are great unmet needs around mental health, ranging from an inadequate supply of practitioners to a dearth of inpatient beds for those with the most acute needs. Residents with untreated mental health issues often become involved in the county's criminal justice system. The law enforcement community is working to better understand mental health needs and participates in Crisis Intervention Team training with the local chapter of National Alliance for Mental Illness. It was clear in focus group interviews that there is still a need to combat stigma among public safety, and the public in general, especially when there is a likelihood of interacting with people with mental health needs. There are misconceptions, particularly around children, about behavior that is perceived as delinquent or disrespectful when it is actually rooted in mental health issues.

# **Opioids**

Opioids are an epidemic in the community, to the point that other public health areas may suffer because of resource redirection. Opioid treatment is described as the number one gap for behavioral health in Randolph County. There are no treatment facilities in the county, nor is there adequate recovery care or support for families. Opioid use is seen across myriad populations, including mothers birthing at the hospital.

# Transportation

For the rural areas of the county, transportation is a significant challenge. Families must make every trip to Asheboro (where the majority of services are located) count, which means consolidating visits to the doctor, pharmacy, Health Department, WIC and other appointments. Organizations that serve the low-income population are spread apart geographically. For example, The Department of Social Services and the Health Department are 6.3 miles away from each other. For residents who don't have a car in working order or enough gas money, appointments are missed and services cannot be accessed.

Randolph County Area Transportation Service (RCATS) is considered to be both an under- and over-utilized resource in the community. While it is well-utilized by the elderly, there is a perception that RCATS is not for everybody. The RCATS service only travels to other counties on a limited basis, which makes appointment scheduling complex for those who rely on it, especially considering the scarcity of specialty health care providers located within the county's borders.

### Insurance

The population without health insurance, generally the working poor, are perhaps the most vulnerable citizens in Randolph County. These are residents who cannot afford monthly premiums on top of rent, utilities, food and other bills, but who don't qualify for assistance programs.

Many providers, especially those in specialty practice, are reluctant to accept a sliding scale for low-income patients. Therefore, the uninsured tend not to have a medical home for primary care and

chronic disease management. This leads to worse health outcomes as well as overuse of the hospital emergency department for care that could be provided in a physician or mid-level provider's office.

# **Assets and Supports**

Through all iterative phases of this assessment, assets related to the key findings areas were identified and considered as they related to opportunities to coordinate, leverage and build from existing supports.

Whether it's collaboration between county departments, working groups or partnerships across sectors, our key informants emphasized a spirit of collaboration across the county. The majority of contributors feel that the small-town feel of Asheboro and the surrounding county makes collaboration more natural and effective. These informal partnerships are an asset to the county that could be strengthened through more structured partnership agreements similar to those that are already making improvements in the county's well-being, like the Opioid Collaborative and Healthy Randolph.

The faith community is also becoming more engaged with health care, including mental health. Their involvement includes partnering with Healthy Randolph, holding services with the needs of those with mental health or developmental disabilities in mind and encouraging members to take advantage of formal and informal resources to support their health. Congregational nursing programs, community gardens and volunteer visitors for day-to-day care are all elements of faith involvement with health that can be leveraged as the county works to improve the health and well-being of its residents.

Pending Medicaid transformation in North Carolina, national and state attention to the opioid epidemic, stakeholder engagement and momentum and the state of readiness for collaboration among health care entities are also assets for Randolph County. The alignment of these factors allows for innovations and changes to be explored and implemented.

# **Action Blueprint**

# Background

In response to our key findings, we identified the following priority issues and populations:

- Uninsured residents
- Substance abuse and mental health
- Children
- Elderly
- Health equity and cultural competency

These findings and priority areas were presented to stakeholders in Randolph County during a strategy session on November 9, 2017. During the session, we sought buy-in from the stakeholders and conducted a series of exercises to explore opportunities for improvement in each area. Capitalizing on Randolph County's many existing strengths and assets, while being mindful of weaknesses and threats, the work of the strategy session forms the backbone of this action blueprint.

Health departments across North Carolina and the country are working in dynamic circumstances where change is becoming a constant. Adaptive leadership skills will be increasingly important for Health Department leaders and staff in order to meet the population health needs of their local contexts. As health departments redefine their roles to meet the demands of changing contexts, opportunities are emerging to form relationships with new nontraditional partners using multi-sectorial approaches and innovative solutions. The challenge to affect the social determinants of health from an upstream perspective focused on prevention will take new skills, new ways of working and creative problem solving. This blueprint is designed with these contextual considerations in mind.

# Using the Blueprint

This blueprint is a starting place for Randolph County to pursue change for each of the priority areas listed above. While the ideas generated from the strategy session are an excellent starting place, they are by no means comprehensive. County leaders can avail themselves of the extensive resources around best practices in public health from organizations like the National Association of County and City Health Officials, the Association of State and Territorial Health Officials, the Center for Disease Control and Prevention, the Promising Practices Network and the National Registry of Evidence-Based Programs and Practices.

As the Health Department and its partners choose, design and implement interventions inspired by the strategy session and supplementary research, it will be helpful to use tools focused on sustainability and health equity in the planning stages. As an example, Washington University in Saint Louis has an excellent set of resources around assessing and planning for sustainability, including samples and templates, which are available at <a href="https://www.sustaintool.org/">https://www.sustaintool.org/</a>.

It is increasingly becoming best practice for health departments and partners to use health equity tools when planning interventions, programs and policies. By approaching issues with an intentional view towards health equity, Randolph County can work to heal the inequities experienced by immigrant and minority populations. An added benefit of using health equity tools

is that they can help prevent unintentional consequences that could negatively affect minority populations. The resources assembled in Appendix 4 include health equity and anti-racism tools and educational opportunities.

Finally, the discussion of each priority area in this report includes a **sample** action plan that demonstrates how ideas could transition into action plans for a particular priority area. The template below may serve as a useful tool to help Randolph County stakeholders plan and prioritize multiple interventions for each priority area. Suggestions for interventions are described in the narrative text under each priority area.

Priority Area: [Name of Priority]  Long-term goals:  1. [List the long-term impact you would like to see related to this priority.]					
Objective	Strategy	Target Population	Actions	Measures	Partners, Resources and Models
[Choose an objective that relates to one of the longterm goals above]	[What can you do to achieve that objective?]	[Whom will the strategy impact?]	[What high- level steps are necessary to implement the strategy?]	[How will you know if the strategy was successful?]	[List partner organizations, existing community resources and models of programs like the one you want to implement]

### **Uninsured Residents**

Moving the needle on the number of uninsured residents in Randolph County will take time, creativity and partnership. More investigation is needed into why this population is not connected to care; beyond financial constraints, what keeps a person or family from enrolling in a program, and is there a way to frame insurance as a smart, achievable investment to this population? We strongly encourage Health Department staff to start with a deeper dive into why one-fifth of their residents do not have health insurance coverage. Staff could work with MERCE and the county's insurance navigators to engage uninsured patients through surveys and listening sessions. Additional insights into the motivations and barriers uninsured residents perceive and experience could inform the design of effective interventions. Given that this is a pervasive issue for Randolph County, it may be beneficial to use consultants with experience with techniques such as design thinking or human-centered design.

After gleaning these perspectives, the Health Department can work to expand the economic literacy of all residents to improve a collective understanding of the health and financial value of prioritizing health insurance premium payments among competing financial demands. Some opportunities could include building on existing financial literacy resources through local churches, Head Start and NC Cooperative Extension.

Randolph Health generates a daily report on "super users," who visit the emergency department three or more times in 90 days to see if they can connect them to Med Assist (a free medication program for those living in poverty) and a primary care physician. The hospital specifically targets diabetics, who tend to be emergency department super users, and they have developed a kit with medications and supplies to carry patients through the gap period from leaving the hospital until Medicaid kicks in. This is one example of a common-sense intervention to improve the health status of a particular population, and the Health Department and its partners may want to expand it to cover other chronic conditions.

Even with focused efforts to help more Randolph County residents to secure health insurance, there likely needs to be a large scale effort to develop a new system for those that will continue to lack traditional coverage. Exploring models such as the Guilford Community Care Network collaborative could potentially connect more residents with care, including preventative services. This will require relationship building with the local physician community as well as strong partnerships with other County leaders in the private and public sectors. The Guilford model has representatives embedded throughout the county's health care system to triage patients and place them into primary care with local physicians, FQHCs and the Health Department. A similar program in Randolph County could also explore cohousing services to increase participation.

At a higher level, supporting economic growth may indirectly improve insurance coverage both by improving employer-sponsored health care plans and improving the ability of workers to afford Affordable Care Act plans. As health leaders integrate themselves in the process of soliciting new businesses and job sites, they can also look for opportunities to support formal and informal living wage initiatives and affordable health insurance options for the employees who work there.

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# Long-term goal(s):

1. Improve the well-being of Randolph County residents by ensuring that all have access to insurance programs.

Objective	Strategy	Target Population	Actions	Measures	Partners, Resources and Models
Increase health care utilization by enrolling qualifying people in access program	Negotiate with providers and facilities to accept modest co- pay from program participants	Low-income residents who do not qualify for Medicaid and who cannot afford insurance on their own	Form steering committee Negotiate with local providers Leverage MERCE resources	% of residents uninsured # of enrollees # participating providers	Randolph Health, MERCE, local providers, DSS Orange Card program through Guilford Community Care

# Substance Abuse and Mental Health

# **Opioid Epidemic**

Opioid abuse is a growing problem that threatens to take over the county's resources, and it will require a multi-sector prevention campaign across the county. Partnership at the local and state levels is crucial to address this threat to public health, and we encourage Randolph County to avail itself of the tools and supports that are available within the state and national contexts, such as those offered by the Substance Abuse and Mental Health Services Administration. Community partnership is crucial to addressing this issue; it may include schools, churches, the mental health community, pharmacists, Randolph Health and the law enforcement community, all of which are represented in the Opioid Collaborative.

The greatest number of overdoses in Randolph County occur in people ages 20 to 29, pointing to a need for prevention programs aimed at young people, as well as through non-traditional venues such as pediatricians, WIC, day care centers and Randolph Health's maternity ward. Numerous organizations, including Project Lazarus, the Parent Resource Center and the Poe Center, offer school- and other community-based programs aimed to educate young people about the dangers of drug use. To reinforce youth prevention training, and because the opioid abuse epidemic is not limited to young people, prioritizing programs that have a parental involvement component has the added benefit of reaching more residents.

Partnership with the health care community through the Opioid Collaborative group and through continuing education are also important for reducing new cases of opioid abuse. The Health Department can also vigorously encourage health professionals to utilize the Narc database when considering a prescription for opioid medications. The Health Department can also support Randolph Health as it develops protocols with emergency department staff to ensure at risk residents have proper follow up after care.

The Opioid Collaborative may want to consider public meetings to educate residents about the origins and dangers of opioid abuse as well as the availability of naloxone and substance abuse resources for families touched by the epidemic. With national and state-wide attention, and the attending momentum of public awareness and funding opportunities, this is an opportune time to address the issue.

While substance abuse and mental illness are not always connected, they often co-occur; it should be noted that effective substance abuse prevention and recovery efforts will require support for psychological well-being for both addicted persons and their families. Stakeholders can utilize referral systems through the Sandhills online assessment tool and call center. The Health Department can also facilitate efforts to create stronger support systems for family members of those dealing with addiction.

### Mental Health

Connecting residents with the mental health care they need can start with education and advocacy, with multifaceted campaigns that include local media and social marketing components. The faith community can be an excellent partner in this effort as many congregations are engaged in wellness initiatives and are well-positioned to take on mental health as an issue. Some interventions can be incorporated at little to no cost, such as holding a special service that welcomes and accommodates

the needs of people living with autism or mentioning the needs of those who struggle with behavioral health issues during prayer services. Local churches can also host and sponsor participation in Mental Health First Aid trainings to increase awareness and learn how to support adults and youth in crisis. The website <a href="www.mentalhealthfirstaid.org">www.mentalhealthfirstaid.org</a> lists several trainers in Randolph and its surrounding counties.

For residents in need of immediate crisis services, the county could increase support for the mobile mental health crisis unit, which is regarded as a good but under-resourced asset. County leadership could also consider supporting the proposed community paramedicine program, which proposes to include emergency mental health support among its services.

Integrating mental health care into other health and social service realms would also increase access to services and support. This could be accomplished in several ways, including cohousing representatives from the National Alliance for Mental Illness (NAMI) in Department of Social Services and Health Department offices or incorporating telepsychiatry into a school-based health clinic. Health Department leaders can seek opportunities for sharing and collaborating on services with the new Sandhills Crisis Center and the Evans Blount Clinic.

Priority Area: Substance Abuse and Mental Health Care					
Long-term goa	als:				
1. Increa	ased mental well	l-being for fan	nilies in Randolp	h County	
Objective	Strategy	Target	Actions	Measures	Partners, Resources
		Population			and Models
Improve	Recruit	Mothers	Identify	# of providers	MERCE, NAMI,
mental	providers	with	appropriate	participating in	pediatricians, family
wellness	who interact	infants	providers	program	practice doctors,
among	with new	under the			obstetricians, WIC,
childbearing	mothers to	age of one	Conduct 1-2	% of mothers	DSS
women	program of	year	training	referred for	
through	screening for		sessions to	further	MCPAP for Moms
early	postpartum		introduce	evaluation	https://www.mcpa
detection of	mood		screening and		pformoms.org/
postpartum	disorders		referral tools	# of screenings	
mood	mood with and referrals				
disorders.	referrals for		Collect		
	mothers who		resources for		
	need support		support and		
			treatment		

### Children

While children are a vulnerable population in Randolph County, there are many existing strengths that can be leveraged to improve their health outcomes. For example, outreach to increase enrollment in NC Health Choice for Children could be conducted through MERCE, Randolph Health, the Partnership for Children, daycare centers and the Health Department to support children getting needed well child and sick visits. RCATS could also be leveraged to increase shuttle service

to pediatric providers and to transport children to orthodontists that accept Medicaid in neighboring counties, which would fill an existing gap in oral health services for children.

For the county's infants and young children, safe sleep and nutrition services can be prioritized. Education about Sudden Infant Death Syndrome (SIDS) requires direct patient education as well as a community campaign to educate parents and caretakers about safer sleep practices and to make parents aware of resources that may assist vulnerable families with baby equipment such as cribs or bassinets if their infants do not have a safe place to sleep. The March of Dimes area coordinators can assist counties with campaign resources for safe sleep and other topics related to maternal and infant well-being: <a href="http://everywomannc.org/about/meet-the-coordinators/">http://everywomannc.org/about/meet-the-coordinators/</a>.

WIC is a community asset several key informants felt was underutilized. To respond to one key informant's report that the appointment process is onerous for families, the Health Department can explore WIC utilization patterns in more depth through clinical data and interviews with the families who participate. If there are areas for improvement, these could form a Quality Improvement project for the department to undertake with a goal of increasing children's access to high-quality foods.

School-based health centers offer another opportunity to improve the health equity and well-being of the county's children. By housing medical, dental, mental health or other services on school campuses, children can be treated efficiently and quickly. Not only does this improve health outcomes, it reduces school absenteeism and allows parents to miss fewer work hours caring for sick children or taking children to appointments. A school health clinic is a flexible entity; staffing ranges from a single practitioner to a team of specialists. Mobile dental and optometry clinics and telehealth services can also be integrated into a school health clinic with relative ease, so providers can be responsive to the needs of the student population. School health centers also offer a common-sense partnership for substance abuse prevention, health education and care coordination programs. The Children and Youth Branch of North Carolina's Department of Health and Human Services provides consultation and funding opportunities for public and private agencies that wish to launch a school health center: <a href="https://www2.ncdhhs.gov/dph/wch/aboutus/schoolhealth.htm">https://www2.ncdhhs.gov/dph/wch/aboutus/schoolhealth.htm</a>.

Possibly the most impactful intervention Randolph County could make would be to pursue access to universal early childhood education through partnerships with agencies like Smart Start, lobbying for more childcare subsidies and building the political willpower for such changes within the city and county governments. In addition to the educational benefit to children of entering kindergarten ready to learn, high-quality daycares and preschools connect children to a host of benefits, including reliable nutrition, parent education and services and early identification of special developmental or intellectual needs. From an economic perspective, reliable, high-quality care for children allows parents to pursue and maintain employment and education for themselves, which leads to a stronger economy and lower reliance on social services.

Priority Area: 0	Priority Area: Children						
Long-term goals:  1. Improve the health of school-aged children in Randolph County							
Objective	Strategy	Target Population	Actions	Measures	Partners, Resources and Models		
Ensure that children are up-to-date on vaccinations and able to receive their mandated start-of-school physical exams in a timely manner	Offer on-site physicals during the first month of the school year	Kindergarten children, uninsured children, new North Carolina residents	Identify appropriate providers for administering exams and vaccines Offer physical exams at temporary locations on school campuses (or at school- based health facilities)	# of days absenteeism due to not having physical \$ recouped by the school districts thanks to children attending school % of children in compliance with vaccine requirements by Oct. 1	MERCE; private practice physicians, nurse practitioners, and physician assistants; school district personnel		

# Elderly

While the elderly population in Randolph has strong resources at present, this is a growing demographic that requires planning in order to have sustainable services that will accommodate a larger population in the future. The chief concerns are ensuring adequate caretaking resources and quality of life through interventions that allow safe aging in place as current middle-aged and baby boomer residents enter the elderly stage of life. At the same time, the current senior population would benefit from having easier access to specialists. This is both a provider shortage issue and a transportation challenge.

The Health Department should continue its efforts to prioritize accessible transport as RCATS undergoes its strategic planning process. Additionally, the Health Department could partner with the Senior Adult Association to explore a volunteer transportation service like the 100 Man Project in Liberty, which assists seniors in getting to medical appointments. And for some medical needs, the proposed community paramedicine program could attend to seniors in their own home.

To ensure a sufficiency of caretakers, the county needs a vibrant economy and an educated workforce. This will involve the Health Department taking an active role in recruiting new business, such as the new mega-site, helping Randolph Health to recruit primary care providers and working with partners like the school systems to train the next generation of home health aides and other

professionals. To attract and retain young people in the county, other quality of life measures, such as transportation, schools and recreational opportunities, can also be considered.

Priority Area: Elderly								
	Long-term goals: 1. Ensure the safety and well-being of Randolph's elderly population							
Objective	Strategy	Target Population	Actions	Measures	Partners, Resources and Models			
Assist elderly residents with safe aging in place by addressing safety and mobility issues within the home	Pair occupational therapists with handymen to visit seniors' homes to identify and remediate structural issues that could lead to falls and other injuries	Low- income senior citizens	Partner with Senior Adult Association to write a grant for project funding Recruit program staff Refer seniors though Senior Adult Association, Randolph Health and primary care	# of preventable injuries sustained by senior adults % of elderly living in nursing homes # of repairs made	Randolph Senior Adult Association, Randolph Health Baltimore's Community Aging in Place — Advancing Better Living for Elders (CAPABLE) program https://nursing.jhu.edu/f aculty research/research /projects/capable/index. html			

# Health Equity and Cultural Competency

While Randolph is a predominantly white county, the growing Hispanic population — and undocumented immigrants in particular — are seen as a vulnerable population. Racism was also cited as a community problem in the county's most recent community health assessment. There is an imbalance in the health care workforce when it comes to underrepresented minorities, particularly in the nursing professions.

The Health Department has the opportunity to lead health equity transformation for Randolph County and its neighbors by infusing programs and policies with a health equity perspective. As demonstrated through emerging best practices among some health departments across the nation, an important first step in working towards health equity is training staff to both understand and work to undo structural racism. Working with an organization such as the Racial Equity Institute, County employees can become better informed about how to make Randolph County programs and services inclusive and culturally competent. Other efforts might include conducting health equity

assessments of internal businesses practices, making needed changes and then serving as a model and integrating similar efforts across other public agencies and community partner organizations. As mentioned, above, using health equity tools when choosing and designing interventions helps ensure that equitable practices are integrated and unintentional negative consequences are avoided.

Community forums, perhaps centered on media such as *Unnatural Causes*, can help to broaden the public's understanding and investment in racial equity and culture. These forums could be hosted in partnership with schools, libraries and organizations such as the local chapter of the NAACP.

The county also may benefit from direct outreach to the undocumented community to reassure them that it is safe to use health care services. The first step is to examine Health Department and other county services from a racial equity standpoint and to make improvements to the services as needed. Internal and external communications plans, outreach through social media, posters, news outlets and community ambassadors can help to accomplish this.

Priority Area:	Priority Area: Health Equity								
	Long-term goals: 1. Ensure equal access to care for vulnerable minority populations								
Objective	Strategy	Target Population	Actions	Measures	Partners, Resources and Models				
Apply an equity analysis to new and existing Health Department programs	Use racial equity tools to evaluate programs and services	Minorities seeking health care in Randolph County	Choose 1-2 tools from the Racial Equity Tools website Designate a group of employees to form an evaluation committee Evaluate programs and plan needed changes	# changes made to County services as a result of equity team analysis % CHA respondents listing racism as community problem	County leadership, NAACP, faith community Racial equity tools https://www.racialequityt ools.org/home				

# Appendix 1: Health Care Utilization Patterns

To analyze where Randolph County residents seek, we compiled a dataset that draws from the North Carolina Hospital Discharge data through the UNC Sheps Center for Health Services Research. For the purposes of this investigation, we requested the most recent five years (from July 1, 2010 to June 30, 2015) of hospital discharge data from Randolph County residents' emergency department, inpatient and outpatient hospital visits.

The original dataset contained 990,195 records, including 277,635 emergency department visits, 71,382 inpatient hospital visits and 641,179 outpatient hospital visits. However, the data from outpatient hospital visits was incomplete for periods of time and did not provide an accurate representation of the patients seeking outpatient care over the five-year period. Furthermore, there are fundamental differences between individuals seeking outpatient care (e.g., elective surgeries) and emergency and inpatient care. For these reasons, we used only the emergency and inpatient data in the analysis, a total of 349,017 records from fiscal years 2011 to 2015. The final dataset represents the most current, valid and reliable data for understanding the hospital-going population of Randolph County.

It is important to understand that the data provided represent unique hospital visits, not unique individuals — individuals may make multiple hospital visits throughout the year, particularly individuals in poorer health. Therefore, hospital discharge data tends to skew towards populations in need of — and with access to — health care services.

# **Who Seeks Hospital Care**

These data provide an opportunity to better understand who in Randolph County is seeking inpatient and emergency department care in hospital facilities. The largest proportions of emergency and inpatient hospital visits were by white (84%), non-Hispanic (91%), and female (56%) individuals with an average age of 42 years. These demographics were relatively unchanged over time, but there were differences in the demographics based on the type of hospital visit. When compared to those seen in the emergency department, those receiving inpatient care were more likely to be female (57% versus 56%), white (87% versus 84%), and over the age of 64 (37% versus 18%) (Table 1).

Although the differences between the demographics seeking inpatient or emergency services seem minor, they are suggestive of fundamental differences between the two types of care. Inpatient services are typically necessary for patients in poorer health and with a poor prognosis; therefore, older individuals are more likely to be provided inpatient care. Aside from age, emergency departments are utilized more by uninsured individuals — 25% of the patient visits to emergency departments were from patients with no insurance, while only 6% of inpatient visits were from uninsured patients (Table 1).

Table 1. Characteristics of hospital visits by Randolph County residents

	<u>Type of</u>	<u>f Visit</u>	Combined ED &
	Emergency	Inpatient	Inpatient
Total patients discharged	277,635	71,382	349,017
Average Age	40 years	49 years	42 years
Age Groups			
< 18 years	16.5	14.4	16.1
18 – 41 years	38.0	20.7	34.4
42 – 64 years	27.5	28.0	27.6
> 64 years	18.0	36.8	21.9
Sex			
Female	56.0	57.3	56.2
Male	44.0	42.7	43.8
Race			
Black or African-American	10.5	7.2	9.9
Caucasian	84.3	86.7	84.8
Other race	5.2	6.0	5.4
Ethnicity			
Hispanic	5.3	5.6	5.4
Non-Hispanic	94.7	94.4	94.7
Insurance Status			
Uninsured	24.7	6.4	21.0
Insured	75.3	93.7	79.0

# Where Residents Seek Hospital Care

Understanding where residents go for care is another fundamental question in assessing the health access needs of Randolph County residents. From the combined emergency and inpatient numbers, 57% of hospital visits by Randolph residents were to Randolph Health. However, this metric provides only a partial understanding of where Randolph residents are seeking care; there are substantial differences between where residents seek care for emergency versus inpatient hospital services. For emergency services, over 60% of Randolph residents are seeking care within the county, but for inpatient services, 60% seek care outside of the county (Table 2).

Table 2. Hospital visits by Randolph County residents, based on location of facility visited

	Type of	Combined ED &	
	Emergency	Inpatient	Inpatient
	(n=277,635)	(n=71,382)	(n=349,017)
<b>Facility Location</b>			
Randolph County	61.4	40.1	57.1
Outside Randolph County	38.6	59.9	42.9

When assessing who leaves the county for hospital care, it is important to acknowledge that, while Randolph Health may be centrally located within the county, there are other hospital facilities outside Randolph County that may be more convenient to some residents. Figure 1 shows the percentage of visits to facilities outside Randolph County from resident zip codes in Randolph County. While data is not available for all zip codes, it is clear that the zip codes closest to the borders of the county have the largest proportion of visits to facilities outside the county, while zip codes more central to Randolph Health have the lowest proportion of visits to facilities outside the county. Figure 1 also shows the percentage of visits to surrounding counties. Guilford County has the highest percentage of visits outside of Randolph County (22%), followed by Forsyth, Davidson and Chatham with 4%.

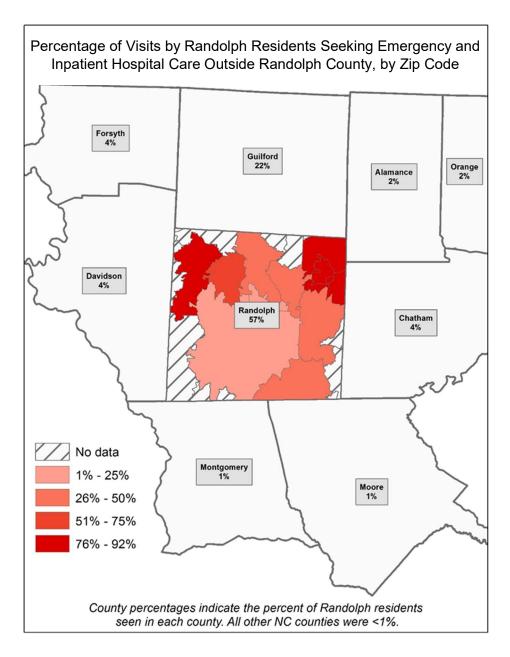


Figure 1. Visits by Randolph County residents to facilities outside the county

Notably, when Randolph residents sought emergency care, they typically visited facilities in close proximity to their residence, either in Randolph County (61%), or the neighboring counties of Guilford (19%), Chatham (5%) and Davidson (5%). When seeking inpatient care, only 40% sought care in Randolph County, while the majority left Randolph County for larger facilities in Guilford (35%), Forsyth (8%), and Orange (5%) Counties. This finding indicates that Randolph residents are leaving Randolph County for specialized inpatient care.

# **Type of Care Provided**

The type of inpatient care provided highlights significant differences in services provided by the Randolph County facilities versus the out-of-county facilities. According to the combined figures for in-county and out-of-county visits, the most common services provided (as identified in discharge billing records) were general medicine (20%), followed by cardiac care (12%), respiratory services (11%), obstetrics (11%) and newborn services (10%). The services provided more commonly outside of Randolph County were general medicine, cardiac care, neurological services, orthopedics, general surgery and psychiatric services (Table 3).

The individual services are difficult to categorize due to the wide array of specialties. However, there were clear differences in the provision of surgical services. Randolph residents who received surgical procedures were more likely to visit a facility outside Randolph County (75% versus 25%) (Table 3).

Table 3. Inpatient services provided Randolph County residents.

	<u>Location of Facility</u>		
	Randolph County	<b>Out-of-County</b>	<b>Combined Inpatient</b>
	(n=28,648)	(n=42,734)	(n=71,382)
Specific Services Provided*			
General Medicine	9.3	10.6	19.9
Cardiac Care	4.3	7.3	11.7
Respiratory	6.4	4.3	10.6
Obstetrics	5.1	5.5	10.6
Newborn	4.9	5.2	10.2
Neurological	2.0	5.5	7.5
Orthopedics	2.0	4.3	6.3
General Surgery	2.7	3.2	5.9
Psychiatry	< 1.0	5.4	5.5
Renal / Urology	2.1	2.3	4.3
Other Surgery	< 1.0	1.9	2.2
Cancer Care	< 1.0	1.6	1.9
Substance Abuse	< 1.0	1.2	1.4
Trauma	< 1.0	1.1	1.2
Type of Services Provided			
Surgical Services	24.9	75.1	21.8
Non-surgical Services	44.4	55.6	78.2

<sup>\*</sup> Services provided to < 1.0% of the patients were excluded.

### Limitations

While this dataset contains the most current and valid data available on the hospital-going population, it is important to be aware of the limitations of using hospital-based data for inferences about health care at the county level. First, the hospital discharge records are representative of the hospital-going population in Randolph County — that is, those who are able to access hospital care. There may be certain vulnerable populations who have limited access to hospital care and/or do not seek medical care. However, the demographics represented by the patients in this analysis were generally comparable to estimates of Randolph County's total population.

Second, these data do not include visits to primary care or other non-hospital based health services, only hospital care. Therefore these data cannot be used to accurately ascertain trends and patterns in access to primary and preventative health services.

Finally, the residents included in this analysis were characterized as Randolph County residents based on their zip code of residence — the US Postal Service aligns zip codes with counties, but these assignments may not always be accurate in zip codes that include multiple counties. This explains why certain zip codes along the edges of Randolph County have no data in Figure 1. Despite these limitations, the hospital discharge data provides important insight into the state of hospital care provided to residents of the county.

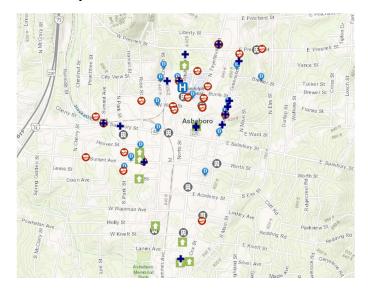
# Appendix 2: Health Care Resources in Randolph County

An inventory of available health resources and health care providers available in Randolph County resulted in 164 locations. This included hospitals in neighboring counties where Randolph County residents sought care according to the Sheps Center for Health Services Research. Where possible, we identified characteristics of providers which could affect their accessibility to the population in the county, including office hours, office locations, insurance plans accepted, availability of payment plans or discounts for the uninsured and languages spoken by health professionals.

To compile this information, we started with the 2016 Randolph Community Health Needs Assessment, the Randolph Senior Adults Association Resource Guide and the membership listings from the Asheboro/Randolph Chamber of Commerce. In addition, we conducted internet searches using the search engine Google and the terms "doctor's offices," "medical clinics," "hospitals," "dentists," "hospice" and "substance abuse" in combination with "Randolph County." To locate specialists, we used Randolph Health's online and printed provider directories. Finally, we reconciled the resultant list with licensed facilities maintained by the North Carolina Division of Health Service Regulation branch of the North Carolina Department of Health and Human Services.

For each provider, we collected information about their accessibility characteristics by visiting their website and calling their office to speak with staff when information was not available online. In some cases, there is information that was not available on a provider's website and was also not known by the staff we spoke with. We reported this data in the index as N/A to indicate that it is unavailable.

An interactive map of these resources is available at <a href="https://arcg.is/0GW4uq">https://arcg.is/0GW4uq</a>, and the inventory of the health resources is also available in the form of a spreadsheet that can be maintained by the Health Department.



# Appendix 3: Qualitative Analysis

With input from Health Department staff, 19 potential key informants representing diverse sectors of the community were contacted and 15 were interviewed. Four focus group discussions were also conducted, two with cross-sector professional collaborative groups and two with health care consumers. This qualitative research supplemented the access and resource data with first-person insights into the challenges and strengths of Randolph County's health and well-being issues, and it was critical to informing our issue prioritization and our action blueprint.

# **Key Informants**

- Ashley Duggins, Pharmacist/Owner, Prevo Drugs
- Barry Morris, Director of Spiritual Care and Community Integration, Randolph Health
- Beth Duncan, Director, Randolph County Social Services
- Beverly Wall, Health Coordinator, Randolph County Head Start
- Dr. Charles Lee, Chair, Randolph County Board of Health
- Courtney Chavis Polk, Randolph Montgomery Family Support and Community Collaboration
- Judy Ebanks, Social Worker, Asheboro School District
- Julie Mabe, Director of Maternity Services, Randolph Health
- Lewis Schirloff, Deputy Director of Emergency Services, Randolph County Emergency Services
- Martha Ogburn, Executive Director, Randolph County Senior Adults Association
- Dr. Robert Dough, Family Physician, Asheboro Family Physicians
- Sam Varner, Wellness Administrator, Randolph County
- Teresa Shackleford, Chief Executive Officer, MERCE
- Victoria Whitt, Director, Sandhills Center for Mental Health
- Wanda Gaines, Therapist, Randolph Counseling Center

### Focus Groups

- Opioid Collaborative
- Minority Diabetes Prevention Group
- Randolph Senior Adult Association
- Juvenile Crime Prevention Task Force

All interviews and focus groups were transcribed to provide an accurate representation of what was said during the conversation, and these transcripts were entered into Atlas.ti, a qualitative analysis software package. The analysis team developed a list of codes based on the types of information the interviews and focus groups intended to elicit. These include how Randolph residents pay for health care, what providers residents use, health disparities, transportation issues, mental health issues, specific populations of interest, models, planning and leadership. Every transcript was read, and when a quote came up that related to these codes, it was highlighted and assigned to that code. Some sentences could be assigned multiple codes. For example, a description of a program for helping children get access to counseling services would be coded as models, children and mental health. After all of the transcripts were coded, lists of all of the quotes

connected to each code were created. Lists were also generated when multiple codes were used for the same quote, which outlines the relationships between the different codes being used.

Through this process, we were able to attach quantitative values to the themes and opinions expressed in the conversations. For example, Figure 1 shows the proportions of the various groups that were coded as vulnerable populations in the Atlas.ti analysis.

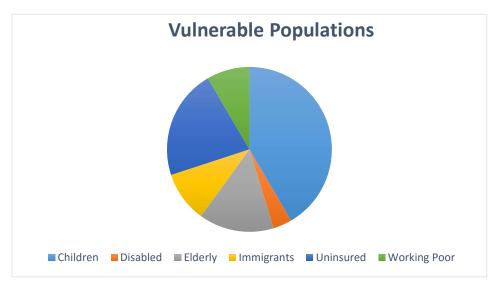


Figure 1: Proportions of vulnerable populations

In this graph, we can see that about half the concerns about people at risk regarded children. Figure 2 shows the proportions of issues mentioned in the interviews and focus groups, which informed our emphasis on mental health and substance abuse as leading topics to address in the strategy session.

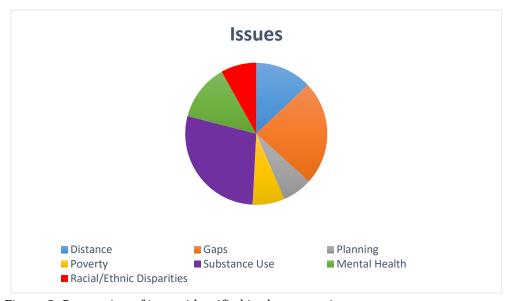


Figure 2: Proportion of issues identified in the transcripts

## **Primary Themes**

In our interviews and focus groups, we asked questions about who is vulnerable in Randolph County as well as questions about what barriers exist for finding care, assets, gaps and specific health issues relevant to each key informant's experience. The two most pressing themes we heard about were the uninsured, specifically the working poor, and a lack of treatment and support for mental health and substance abuse issues.

"We're really working with the working poor. They can't afford insurance premiums along with rent, food and utilities, and they don't qualify for help."

It is difficult to connect the working poor to insurance when they do not qualify for Medicaid and they are at high risk of going without primary care and care management for chronic conditions.

"The challenge we have with the uninsured is primary care. It feels like we're treading water working in this system."

Regarding mental health, there are not enough resources, especially for vulnerable populations like children and immigrant parents.

"Many parents have their own mental health needs, but they will go without treatment for themselves because it can be difficult to coordinate; there are language barriers, or it's too expensive [co-pays, medications] to handle dual treatment."

We also learned that there are adults and children who are involved in the justice systems either due to their untreated mental illness or because it is the only way to connect them with the help they need:

"They are charging a child that [they] would normally divert just so they could leverage services. And that tells me that we need to do a better job on the front end of the system having access to the services."

The opioid crisis came up in conversations that were both expected (the Opioid Collaborative) and unexpected (maternity services).

"We are really struggling with the drugs issue in our community. You can never tell who's addicted just by looking."

There need to be more options for treatment within the county not only for detoxification but for medication assistance and after care as well. Though the activity is illegal, our informants emphasized that, "you can't arrest your way out of this one," and both the addict and his or her family need support.

# **Secondary Themes**

Children, elderly residents and health equity (specifically for immigrant populations) were themes that came up frequently in our qualitative analysis. Children were of particular concern to our key informants; because they are unable to advocate for themselves, there is great concern that they will go without services, even if those services are available.

"Children are very vulnerable, especially if you don't get to them early."

Interview responses displayed concern about children's nutritional status, access to early childhood education and access to health care. One informant offered this summary about the difficulty of connecting some families with services:

"There has to be a way for the working poor to stand on their own two feet and afford childcare. There's an enormous gap between the need and how many we can help."

Baby boomers are more at risk now than the current elderly population due to lack of access to benefits such as Medicare.

"For low-income people who have Medicare, there are fewer access issues. But for those who are 50-65, cost is a barrier to getting insurance. They are very often choosing between medication, rent, and food."

The rural elderly, however, are also considered to be an at-risk population, especially those without a support network to help them run errands and get to medical appointments.

"Undocumented immigrants are very afraid to make themselves known, and this is leading to a reduction in service utilizations across the board."

Not all immigrants are undocumented, of course, but for those who do not speak English fluently, informants remarked upon provider bias and a lack of health workers who speak Spanish fluently, including in the mental health field. We also heard that some Hispanic residents go to Siler City for health care because it is perceived as "more user friendly" to them.

# Appendix 4: Equity and Cultural Competency Training & Tools

While there are numerous options for trainings nationwide, the Racial Equity Institute is a well-regarded resource located in Greensboro.

# **Racial Equity Institute**

# https://www.racialequityinstitute.org/

Based in Greensboro, the Racial Equity Institute offers trainings that help organizations understand and address racism both internally and in the communities they serve. They spend up to 18 to 24 months working with an organization to effect these changes through assessments, trainings and coaching.

As a supplement to training, and to assist Health Department staff with planning programs with an equity perspective, Randolph County can avail itself of numerous online resources regarding equity and cultural competency. These provide guidance to organizations in everything from recognizing the impact of race and place on health status to forming and implementing plans to address racial inequalities in an organization or community.

# **Bay Area Regional Health Inequities Initiative (BARHII)**

# http://barhii.org/

Undocumented immigrants were identified multiple times in key informant interviews and focus groups as a vulnerable population. BARHII has a number of health equity resources, including resources for reaching out to immigrant communities who may be hesitant to access health care services due to fear of deportation. Resources for reaching this population are available at <a href="http://barhii.org/immigration/">http://barhii.org/immigration/</a>.

### **Unnatural Causes**

# http://www.unnaturalcauses.org/

This seven-part documentary explores the racial and socioeconomic foundations of health inequality. The website also offers interactive features, action toolkits and discussion guides. The documentary could be used to facilitate community conversations about race and cultural competency.

# **Government Alliance of Race and Equity**

# http://www.racialequityalliance.org/resources/

The Alliance's online resources include toolkits, a how-to manual on racial equity action plans and the resource guide <u>Racial Equity: Getting to Results</u>.

### **Racial Equity Resource Guide**

# http://www.racialequityresourceguide.org/

The Racial Equity Resource Guide, funded by the W.K. Kellogg Foundation, allows you to customize a collection of resources related to racial equity.

# National Association of County and City Health Officials (NACCHO) Health Equity and Social Justice Resources

http://www.naccho.org/programs/public-health-infrastructure/health-equity

NACCHO's resources include a web-based training for public health professionals, recorded webinars on social justice and health equity tools.

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